Interactome Biotherapeutics Announces Exclusive Global Option Agreement & Partnership with Oxford University Innovation

Partnership to accelerate development of Novel Small Extracellular Vesicle CNS Drug Delivery Platform and enhance Interactome Biotherapeutics' Pipeline

OXFORD , UNITED KINGDOM, March 25, 2025 /EINPresswire.com/ -- Interactome Biotherapeutics, a West Michigan based biotechnology company focused on advancing innovative biotherapeutics, today announced an exclusive global option agreement and collaboration with Oxford University Innovation (OUI), the commercialization arm of the University of Oxford. This collaboration has been focused on the development and commercialization of groundbreaking patents originating from the laboratory of Dr. Matthew Wood, distinguished Professor of Neuroscience at the University of Oxford.

As part of the agreement, Interactome Biotherapeutics has secured the exclusive global option rights to key patents related to Engineered Extracellular Vesicle-based drug delivery technologies, which have been pivotal in enhancing its growing therapeutic pipeline. These technologies promise to revolutionize the delivery of nucleic acids, proteins, and small molecules to targeted cells and tissues in the brain and central nervous system, offering potential applications in various therapeutic areas and expanding Interactome's asset pipeline for budding Large Pharma collaborations.

Over the last 5 years, Interactome has focused its efforts on the manufacturing, scalability, consistency, in-process monitoring, and quality control of Engineered Small Extracellular Vesicles and gained significant expertise, innovation, and traction with both Upstream (USP) bioreactor production and Downstream (DSP) purification technologies of novel stem cell populations. The patents covered under this agreement include technologies that leverage Engineered Small Extracellular Vesicles (sEV) as advanced delivery platforms for therapeutic molecules.

One innovative approach leverages an engineered binding domain present on the surface of all sEVs to load nucleic acids, proteins, and small molecules—without requiring host cell modification. By ensuring consistent sEV populations, this method enables more precise and efficient drug delivery. Another innovation introduces a specialized transmembrane protein that increases EV cargo capacity while enabling targeted delivery. This protein not only facilitates the attachment of targeting moieties but also allows for controlled cargo release within recipient cells, enhancing the potential of EVs for precision medicine applications.

"Given the difficulties and challenges traversing the liver and immunotoxicity of Synthetic Lipid Nanoparticle (LNPs) Delivery Technologies, these assets have the potential to provide a targeted, immune silent approach to delivering precision therapeutics into the brain. We are thrilled to enter this exclusive global option agreement with Oxford University Innovation and to continue our strong collaboration with this elite Institution," said Dr. Frederick Naftolin, MD, PhD, VP and Co-Founder of Interactome Biotherapeutics. "This collaboration also builds on our previous success with Dr. Michael Chopp's technology, in-licensed from Henry Ford Innovations, positioning Interactome Biotherapeutics at the forefront of the next generation of RNA and protein-based therapies."

Dr. Matthew Wood, whose research has been instrumental in the development of these technologies, added, "I am excited to see our work with Extracellular Vesicles and their potential for targeted therapeutic delivery progress to this stage. Partnering with Interactome Biotherapeutics, with its strong commitment to advancing this emerging therapeutic area, will ensure that these innovations make a real-world impact in the treatment of diseases." By combining these new sEV-based technologies with the company's existing collaborations and intellectual property, Interactome Biotherapeutics is poised to lead the field in RNA and protein-based targeted drug delivery.

About Interactome Biotherapeutics
Interactome Biotherapeutics is a Midwest based biotechnology company focused on advancing innovative stem cell sEV drug delivery technology. By leveraging cutting-edge science in RNA and protein-based therapeutics, Interactome Biotherapeutics is committed to addressing unmet medical needs and developing transformative treatments for patients across diseases of the Central Nervous System.

About Oxford University Innovation
Oxford University Innovation (OUI) is the commercialization arm of the University of Oxford. It works with researchers to create and develop intellectual property from the university's world-leading research, licensing these innovations to companies and enabling the creation of spin-out businesses. OUI is dedicated to translating groundbreaking academic research into real-world applications that benefit society.

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